them, in the absence of any acceptable evidence that the pineal has an endocrine function, is difficult to see. Likewise the thymus; likewise the spleen. We must force ourselves to require evidence rather than the rosy theoretical postulates that may be put forward as individual concepts.

One other matter: does the administration of a potent hormone stimulate the like gland in the patient's body, or does it tend to suppress its activity? This is a fundamental question, and one which should be answered only by impersonal evidence. The answer is not yet complete for the various glands. The direction of the evidence is away from the concept of gland stimulation toward rest of the gland in question. Quantitative differences in dosage have not been shown to influence this problem.

It would seem that fairly general agreement to the following statements should exist:

1. In general, hyperactivity of endocrine glands can be treated most satisfactorily by surgical interference or depressing x-radiation.

2. In hypofunction, critical evaluation of the potency of the particular product to be used in substitution is essential and, furthermore, potency tested by the same method of administration as that to be used therapeutically.

3. The use of more than one potent product at a time will probably be applicable to the minority of cases. Shotgun therapy is scarcely justifiable, whether the products be potent or inert.

San Diego County General Hospital.

Howard A. Ball, San Diego.

## WHO SHOULD BE STERILIZED?

**\*** 

At the Norwalk State Hospital we advise sterilization in every case where we believe that it will help prevent future mental disease.

We firmly believe that the defective traits which result in insanity are transmitted from parent to child; but even if this belief is incorrect, and training and environment are the controlling factors, the parent who is either periodically or permanently handicapped by insanity cannot provide the proper home and training for offspring.

Observation of the parents of many of our patients would convince anyone that the child had somehow gotten characteristics from the parent. We may accept as a fact that the child inherited the shape of his nose and other physical traits, and still deny that he inherits any mental traits. But the fact remains that the child has these same traits, and if he didn't inherit them, he must have acquired them from training or environment. If this is true the parent has not, because of his own limitations, been an efficient parent.

Dementia praecox and manic depressive insanity form the vast majority of our admissions. The patients with dementia praecox tend to remain in hospitals, but many do reach a stationary level, leave the hospital, and beget children. We have several times failed to convince parents that

their daughters should be sterilized before leaving. They were so innocent, or so well protected, that pregnancy would be impossible. Later, these same daughters have been returned to the hospital pregnant, and the parents would be surprised at our refusal to induce abortion.

About 10 per cent of the offspring of parents with dementia praecox develop dementia praecox, but the incidence of the various traits classified as "psychopathic personalities" in the children of dementia praecox parents is much higher. We advise the sterilization of all women patients diagnosed dementia praecox who leave the hospital during the reproductive age, and of all men leaving the hospital, except those showing profound deterioration.

The development of insanity in the children of parents having manic depressive psychosis is at least three times as common as of parents having dementia praecox. This is probably largely influenced by the smaller number of dementia praecox patients who leave the hospital.

These patients, the manic depressives, recover from their attacks and return to home life. If the patient is a married woman, she frequently breaks under the strain of childbearing or lactation; if a man, additional children add to his economic burden. If single, the onset of another attack may be marked by sexual excesses, or an ill-advised marriage. These patients all deserve sterilization, for their own benefit as well as for eugenic reasons.

The following history is fairly common:

Case No. 8778. Manic depressive. Thirty-sevenyear-old woman; Catholic; six children, ages three months to eleven and one-half years. Self-accusatory. Worries over premarital intercourse, and postmarital contraceptives. Following each birth, believed child was syphilitic; became depressed. Following last birth, attempted to kill child and self

Formerly we saw little merit in sterilizing patients suffering from general paralysis of the insane. We felt that syphilitics usually aborted, and that the paretic lived but a short time, and was physically unable to reproduce.

Under present-day treatment, 30 to 50 per cent of the paretics leave the hospital, return to work, and are frequently restored to competency by the courts, as they meet the legal requirements of sanity. This condition is due to an acquired disease, but the permanency of this remission is very uncertain. The parent is definitely handicapped, and should be subjected to neither the stress of childbearing, nor the responsibility of raising children. The possibility of congenital syphilis must be recognized, as well as the liability of the child being orphaned at an early age. A child born to such a parent is sure to join the underprivileged class.

The paretics usually welcome sterilization when convinced that it does not alter sex desire or potency. One man visited the hospital a few weeks after going home, and requested that he be "unsterilized," and said he came at his wife's request, as she wanted more children. Our infor-

<sup>•</sup> From the Norwalk State Hospital, Norwalk, California. This paper is in two parts.

mation regarding the wife made us doubtful regarding her motives in making this request.

The hereditary transmission of epilepsy is doubtful, but there is no doubt that an epileptic parent cannot meet his responsibilities as a parent and, therefore, should be sterilized.

Psychosis develops in the various types of psychopathic personalities. These maladjusting individuals find themselves in intolerable situations, and have outbreaks resembling the various classical psychoses. When the unpleasant situation is corrected for them, their symptoms fade, but the instability and inability to adjust remain.

In this group are the thief, the pathological liar, the nomad, the chronic alcoholic, the drug addict, and the sex pervert. It is a frequent observation that at least one parent of these psychopathic patients has similar traits. These patients should be sterilized for all three of our reasons—to prevent the transmission of their undesirable traits to their offspring, because they make poor parents of underprivileged children, and because they are apt to have more mental outbreaks under strain of parenthood. The last is the least important, as responsibility weighs but lightly on most of these irresponsibles.

There is no conceivable reason to expect that sterilization will correct the desires and impulses of the sex pervert, and the advocating of such a procedure with promise of cure can only tend to discredit sterilization. Even castration in the male adult produces little, if any, immediate effect.

The instability in the feeble-minded results in attacks of the same kind that we see in the psychopathic personality group, and they should be sterilized for the same reasons.

The following is a sample case:

Case No. 8132. Female. Age, thirty-two. Has five children under twelve years. The oldest, a girl, is now a ward of the Juvenile Court. Patient is very promiscuous, and entertains men at home in the presence of her children. Sixth child was born at Norwalk State Hospital.

Norwalk State Hospital.

M. J. Rowe, Norwalk.

(To be continued)

## REDUCIBLE HERNIA AND LIFE EXPECTANCY

Abdominal hernia is more frequent than appendicitis and, excluding tuberculosis, it claims more victims than any other disease that afflicts man. It is estimated that one out of every fifteen individuals has a hernia of some form, usually inguinal. A person with hernia is barred from all branches of the government service and from municipal, police and fire departments, as well as many industrial organizations.

The earning capacity of such individuals is reduced 15 to 50 per cent, depending on the location and size of the hernia, and degree of control with a truss. Many life insurance companies refuse hernia subjects, others reject them unless the

hernia is small and easily held with a truss. At best the subject's life expectancy is shortened, his earning capacity diminished, and his usefulness to the community and his family lessened.

The prognosis of reducible hernia is always serious. While a majority of inguinal and umbilical hernia in infants (under two years of age) can be cured by mechanical treatment, there is danger that the hernia will slip by the truss and strangulate. However, at this age strangulation is not common. While there is a tendency on the part of some general surgeons to operate on young children earlier than formerly, it is held by some that, as a rule, mechanical treatment should be given a trial for small, easily retained hernias in children under four years old. Operative treatment at this age is attended by more dangers than in older children.

The infant is liable to develop pneumonia following the anesthetic, and is very susceptible to gastro-intestinal disorders when confined to bed. There is increased danger of wound infection from urine and feces, and when the baby is confined with other sick children there is considerable danger of such infectious diseases as diphtheria, scarlet fever, measles, erysipelas, and whoopingcough.

The radical operation is always to be recommended as the treatment in young children when the hernia cannot be controlled by a truss, or when the hernial opening does not decrease in size under palliative measures. In older children and adults, the operation offers the only prospect of cure; the danger is very slight, especially with local anesthesia, and the percentage of recurrence is very low.

To those patients in the advanced years of life all surgical procedures carry a multitude of dangers; the principal ones, perhaps, being the general anesthetic and the confinement to bed.

Fortunately, the primary development of hernia in the aged is infrequent, probably because these individuals avoid heavy labor in an effort to conserve their declining physical powers. Consequently, they are exempt from the usual causative factors of hernia that apply to the active years of life.

The possession of small reducible hernia is apparently more of an asset than a handicap; unless it becomes strangulated it does not shorten the duration of life, and it compels the individual to take care of himself, to avoid the heavy work and exposure with their attendant wear and tear on the body, which is the usual lot of the elderly individual who is sound.

The hernia of the aged is usually more difficult to control with a truss on account of the relaxation of the hernial rings. When operation is indicated, the danger can be minimized by the use of local anesthesia, and the period of confinement is shortened because recuperation is more prompt than after general narcosis.

727 West Seventh Street.

Leigh F. Watson, Los Angeles.